

Quality Control

Work Order ID Wednesday, March 30,									Page 1
Item ID: D3492 Revision ID:	-043	Acc	cept				Setup Star		
Item Name: Plug As		1111/11 11/11/11/11					Stop		
Start Date: 3/30/20 Required Date: 4/4/20				Cust Item ID: Customer:					
Reference:		1 188118 81111 8811 1881				_			
Approvals: Proce QC:	<b>*</b> **	Date: <i>//3-3</i> /7 Date: S	ooling: PC (Y/N):	Date:			Run Star Stop		
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID T	ool# Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr				,				
D3492	Rev C								
Hardinge CNC Lathe Small	Hardinge CNC LATHE SMA Memo 1-Turn as per Fo Rev:	olio FA632 & Dwg D3492	. 1	io		60	<u>\$</u> _		
110  QC  Quality Control	QC2- Inspect parts off mach		0.00 0.00 (1) 4) S			60	þ		
120 	QC8-Inspect parts - second  Memo	check	0.00	11.4-6		60	K		- <u>·</u>

W/O:			WORK ORDER CHANGES									
DATE	STEP	PR	OCEDURE CHAN	IGE		у	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
		•										
		·.			·							
									,			
			- United the American				***************************************					
Part No	•	PAR #:	Fault Categ	ory:	NCR:	Yes N	lo <b>DQ</b>	<b>A</b> :	Date:			
	Re	esolution:	Disposition	:	QA: N	C Clo	sed:	,	Date:			
NCR:		,	WORK ORDE	R NON-CONFOR	RMANCE (I	NCR)						
DATE	STEP	Description of NC		Corrective Action	Section B		Verific		Approval	Approval		
	JILI	Section A	Initial Chief Eng	Action Descripti Chief Eng		ign & Date	Secti	on C	Chief Eng	QC Inspector		

### Work Order ID 67765

Wednesday, March 30, 2011 10:34:49 AM



Page 2

Item ID:

D3492-043

Accept

Setup Start

Stop



**Revision ID:** 

Item Name:

Plug Assembly

3/30/2011

**Start Qty: 60.00** 

Req'd Qty: 60.00



**Cust Item ID:** 

**Customer:** 

Reference:

**Start Date:** 

Α.	nnr	ova	le	
A	וענ	uva	13	

Process Plan:

Date:

**Tooling:** 

Date:

Run

Start Stop

Sequence ID/

Required Date: 4/4/2011

QC:

Date: SPC (Y/N):

Date:

Tool ID

TooI# Plan

Code

Accept Qty

Reject Qty

Reject Insp. Number Stamp

**Work Center ID** 130

HandFinish

Hand Finishing

Operation Description

Chemical Conversion Coat per QSI005 4.1

**Run Hours** 

Set Up/

0.00

0.00

140

Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QS1005 4.3-Alum

M116964.

Memo

Memo

(Flat End Only)□START TIME: TEMPERATURE:

0.00

0.00

60 BK 11-4-11

150

Quality Control

QC3- Inspect Part Finish

0.0.0

Memo

0.00

60 \$ Jel 11/04/4

W/O:			W	ORK ORDER CHANG	ES					7
DATE	STEP	PRO	OCEDURE CH	ANGE	E	Зу	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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									_	-
Part No	:	PAR #:	Fault Cate	egory:	_ NCR:	Yes N	lo <b>DQ</b>	<b>A:</b>	Date:	
	R	Resolution: QA: N/C Closed						Date:		
NCR:			WORK ORD	ER NON-CONFORM	ANCE (	NCR)				
DATE	STEP	Description of NC	1 44 1		ion B	Sign &	Verific		Approval	Approval
	O I L I	Section A	Initial Chief Eng	Action Description  Chief Eng		Date	Section	on C	Chief Eng	QC Inspector
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#### Work Order ID 67765

Wednesday, March 30, 2011 10:34:49 AM



Page 3

Item ID:

D3492-043

Accept

Setup Start

Stop



**Revision ID:** 

Item Name: **Start Date:** 

Plug Assembly

3/30/2011

**Start Qty: 60.00** 

Req'd Qty: 60.00



**Cust Item ID:** 

**Customer:** 

Tool ID

Reference:

A	pprovals:	
$\boldsymbol{\Lambda}$	ppi ovais.	

**Process Plan:** 

QC:

Date:

Date:

**Tooling:** SPC (Y/N):

Date:

Tool# Plan

Code

Date:

Start Run

Reject

Qty

Stop

Sequence ID/ Work Center ID

Required Date: 4/4/2011

Operation Description

Identify as per dwg & Stock Location: [-P-13]

Set Up/ **Run Hours** 

0.00

Qty

Accept

Reject Number

Insp. Stamp

160

Packaging Packaging

Memo

0.00

170

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

W/O:			W	ORK ORDER CHANG	ES					1
DATE	STEP	PRO	OCEDURE CH	ANGE	Ву	,	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						-				
Part No	:	PAR #:	Fault Cat	egory:	NCR: Y	es N	o <b>DQ</b>	<b>4</b> :	Date:	
	Re	esolution:	Dispositi	on:	_ QA: N/0	Clos	sed:		Date: _	
NCR:			WORK ORE	ER NON-CONFORMA	NCE (N	CR)				
DATE	STEP	Description of NC		Corrective Action Section			Verific	ation	Approval	Approval
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng		gn & ate	Secti		Chief Eng	QC Inspector

#### **Picklist Print**

Wednesday, March 30, 2011 10:34:54 AM

Work Order ID: 67765

Parent Item: D3492-043

Parent Item Name:

Plug Assembly

Start Date: 3/30/2011

Required Date: 4/4/2011

**Start Qty:** 60.00

Required Qty: 60.00

Comments:

IPP Rev: A 06.03.21 New Issue JLM

IPP Rev:B 06-08-28 As per Rev B JLM 1PP Rev:C 07-12-06 Rev C dwg DD verified by:EC

IPP Rev:D 08-05-07 add note to count qty DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Dat Issued Issu	State	us
M6061T6R0.750		Purchased	No			100	f	24.8120	0.0625	3.947368	a)4/	7	4

6061-T6 Round Bar .750"

<b>Location</b>	Loc Oty	Loc Code
MAT013	24.812	
112442	0.812	
<b>~</b> 116406	24	

Page 1

	•									
W/O:		***************************************	WC	RK ORDER CHANG	GES					· ·
DATE	STEP	PR	OCEDURE CHAI	NGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
					-	3				
Part No	•	PAR #:	Fault Categ	jory:	NCF	R: Yes	No DQ	<b>A:</b>	Date:	
	Res	olution:	Disposition	):	QA:	N/C C	losed:		Date: _	
NCR:		,	WORK ORDE	R NON-CONFORM	ANCE	(NCF	3)			
DATE	STEP	Description of NC			ction B	Cian (	Verific		Approval	Approval
	J	Section A	Initial Chief Eng	Action Description Chief Eng		Sign 8 Date		on C	Chief Eng	QC Inspector
				<del></del>						
				·						

DART AEROSPACE LTD	Work Order:	1,1765
Description: Plug	Part Number:	D3492-3
Inspection Dwg: D3492 Rev: C		Page 1 of 1

#### FIRST ARTICLE INSPECTION CHECKLIST

•	FIRST	ARTICLE IN	SPECII	ON CHE	CKLIST	•
	X	First Artic	le	_ Proto	type	•
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.750	+/-0.010	1,100				5/2-9
Ø0.582	+0.008/-0.001	0.582				
0.045	+0.000/-0.002	-0445			٠.	
0.060	+/-0.005	-039				
0.060	+/-0.005	-038				
0.500	+/-0.010	(SP)0	/			/
0.090	+0.000/-0.002	-088				
			,			
			_			
						·

Measured by:

Date: 11 4 6

Prototype Approval: N/A

Date: N/A

Rev	Date	Change	Revised by	Approved
Α	06.07.07	New Issue P/O D3492-043	KJ/JLM	
В	06.10.16	Ø0.750 was Ø0.625	KJ/JLM ,	
С	08.09.04	Tolerance revised for Ø0.750	KJ/DD	78

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W/O:			WORK ORDER CHANGES										
DATE	STEP	PR	OCEDURE CH	ANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
							•						
Part No	:	PAR #:	Fault Cat	Fault Category: NCR: Yes No DC						)QA: Date:			
	Re	esolution:	Dispositi	Disposition: QA: N/C Closed:									
NCR:			WORK ORI	DER NON-CONFORM	ANCE	(NCR	)						
DATE	STEP	Description of NC			tion B	0:	Verific	ation	Approval	Approval			
DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	scription   Sign &   <sub>Sectio</sub>		on C	Chief Eng	QC Inspector				
										·			

D3492-XX PLUG (SEE TABLE) -NAS1611 PLUG (SEE TABLE)

#### **D3492-XXX PLUG PARTS LIST**

QTY -041	-043	QTY -045	QTY -047	QTY -049	QTY -051	QTY -053	PART NUMBER	DESCRIPTION
X							D3492-041	PLUG ASSEMBLY
	X				_		D3492-043	PLUG ASSEMBLY
		Х					D3492-045	PLUG ASSEMBLY
			Х				D3492-047	PLUG ASSEMBLY
				Х			D3492-049	PLUG ASSEMBLY
					Х		D3492-051	PLUG ASSEMBLY
						Х	D3492-053	PLUG ASSEMBLY
1							D3492-1	PLUG
	1						D3492-3	PLUG
		1					D3492-5	PLUG
			1				D3492-7	PLUG
				1			D3492-9	PLUG
					1		D3492-11 *	PLUG
						1	D3492-13	PLUG
		1					NAS1611-005	O-RING
			1				NAS1611-007	O-RING
1							NAS1611-010	O-RING
						1	NAS1611-012	O-RING
	1			ĺ			NAS1611-013	O-RING
					1		NAS1611-015	O-RING
				1			NAS1611-016	O-RING

& & &

NOTES: 1) O-RING: POSSIBLE SUPPLIER P/N: NAS1611-XXX OR PARKER 2-XXX

SHOP COPY RETURN TO ENGINEERING UNCONTROLLED COPY SUBJECT TO AMENDMENT SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 44 11-03-3 U

DEO ATTACHED

C	ADD -049/-051;-053, CHANGE DRAWING FORMAT	PH	07.10.05
В	ADD -047; UPLIATE DIM A FOR -045	PH	06.05.11
Α	NEW ISSUE	PH	06.01.04
REV.	DESCRIPTION	BY	DATE

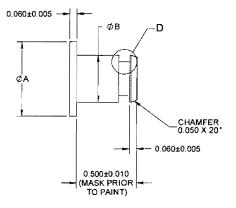
DESIGN	g <sub>4</sub>	DART AEROSPACE LTD				
DRAWN	ALL.	HAWKESBURY, ONTARIO; CANADA				
CHECKED		DRAWING NO.	REV. C			
MFG. APPR.	W. 0	D3492	SHEET 1 OF 2			
APPROVED	W	TITLE	SCALE			
DE APPR.	-#	PLUG	2:1			
DATE 07.1	0.05	COPYRIGHT © 2007 BY DART AEROSPACE LTD  THIS DOCUMENT BY PRIVATE AND COMPOSITION AND IS SUPPLIED ON THE SEPPRESS CONDITION THAT IT IS.  NOT TO BE USED FOR ANY PROPOSE OR COPE ON COMMENSATION TO NOT OTHER REPORT WITHOUT				

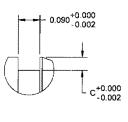
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W/O:	•	WORK ORDER CHANGES										
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DATE	STEP	Description of NC			ction B		Verification	Approval				
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								,				

-POWDER COAT THESE FACES ONLY PER NOTE 2

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**DETAIL D** 

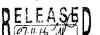
#### D3492-XX PLUG

Wo 4765

#### **D3492-XX PLUG MACHINING DETAILS**

P/N	Α	В	С	MATERIAL SPEC
D3492-1	0.625	0.394	0.055	M6061T6R0.625
D3492-3	0.750	0.582	0.045	M6061T6R0.750
D3492-5	0.375	0.188	0.045	M6061T6R0.375
D3492-7	0.500	0.270	0.045	M8061T6R0.500
D3492-9	0.938	0.750	0.045	M6061T6R1.000
D3492-11	0.850	0.664	0.045	M6061T6R0.875
D3492-13	0.750	0.520	0.045	M6061T6R0.750

DEO ATTACHED



DESIGN DART AEROSPACE LTD DRAWN HAWKESBURY, ONTARIO, CANADA DRAWING NO. CHECKED REV. C D3492 MFG. APPR. SHEET 2 OF 2 APPROVED TITLE SCALE DE APPR. 4:1 COPYRIGHT © 2007 BY DART AEROSPACE LTD
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NOTES:
1) MATERIAL: ALUMINUM 5052-H32 OR 6061-T6 OR 1100-0 PER QQ-A-225/7 (5052) OR QQ-A-225/8 (6061) OR QQ-A-200/8 (6061) OR QQ-A-225/1 (1100) (REF. DART MATERIAL SPEC M6061T6R0.000)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED 4) UNITS: INCHES UNLESS OTHERWISE NOTED 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX 6) IDENTIFICATION: N/A 7) WEIGHT: N/A

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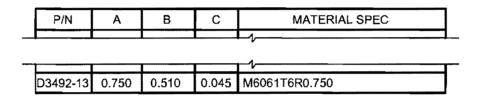
W/O:		WORK ORDER CHANGES										
DATE	STEP	PR	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector					
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Part No		PAR #:	Fault Cate	gory:	NCR: Yes	s No DC	A:	Date: _				
	Res	solution:	Disposition	n:	QA: N/C	Closed: Date:						
NCR:			WORK ORD	ER NON-CONFORM	MANCE (NO	R)						
DATE	STEP	Description of NC	Corrective Action Section B  Initial Action Description Sign & Section C			Approval						
	Section A		Initial Chief Eng	Action Description Chief Eng	Dat		tion C	Chief Eng	QC Inspector			
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DRAWING	NO.	TITLE			REV. C	DART AE	ROSPACE LT	<b>D</b> D.E.O. NO	).	SHEET NO.	SCALE
D3492		PLUG				ENGINE	ERING ORDER	<b>R</b> D3492-0	C-1 4 0	SHEET 1 OF 1	NTS
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SHEET 2 MODIFY -13 PLUG AS SHOWN:

IS:

#### D3492-XX PLUG MACHINING DETAILS



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WAS:

## **D3492-XX PLUG MACHINING DETAILS**

P/N	Α	В	С	MATERIAL SPEC					
1.									
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DATE	STEP	Description of NC	Initial	Corrective Action Sec Action Description	ction B Sign 8		Verification Approval					
		Section A	Chief Eng	Chief Eng	Date		Chief Eng	QC Inspector				
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